

Abstract

Conveyor Belt Cleaning System

A conveyor belt cleaning system being a torsion blade holder assembly having a mounting sub-assembly and a blade support sub-assembly. The mounting sub-assembly has a first hollow member and a second member situated at least partially therein with torsion elements in the plurality of spaces or cavities between the first hollow member and the second member. The blade support sub-assembly, in which a scraper blade is secured, is attached to the second member such that when the scraper blade meets resistance while scraping the surface of a conveyor belt, the torsion elements are compressed and the blade support sub-assembly with the scraper blade rotates away from the conveyor belt. The blade support sub-assembly includes notched receiving members for receiving the scraper blade, a face plate extending between the notched receiving members approximately parallel to the scraper blade such that at least a portion of the scraper blade rests flush against the face plate when the scraper blade is situated in the notched receiving members, a horizontal blade stabilizer approximately perpendicular to and extending beneath the face plate, and a means for vertically adjusting the scraper blade within the notched receiving members. The means for vertically adjusting is one or more adjustable lock bolts extending upward through the horizontal blade stabilizer for adjusting the scraper blade up and down within the notched receiving members. The torsion blade holder assembly optionally includes a shield and a means for spraying a liquid on the conveyor belt.

5

10
11
12
13
14
15
16
17
18
19
20

20